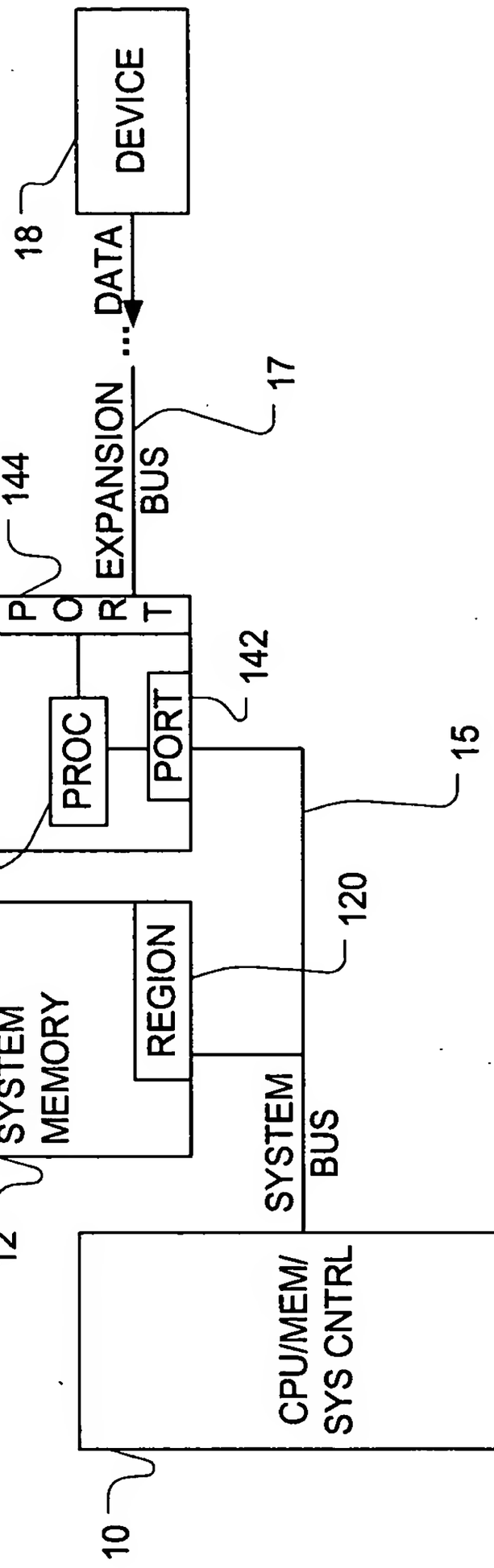


Figure 1

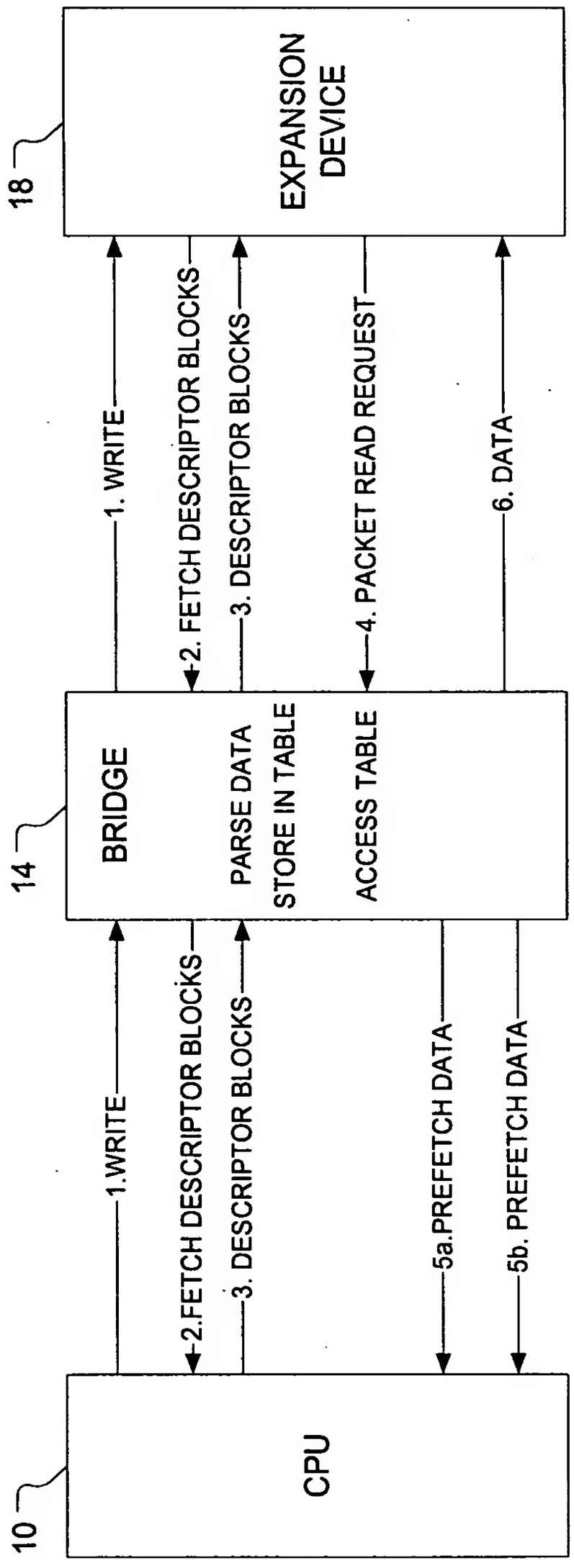
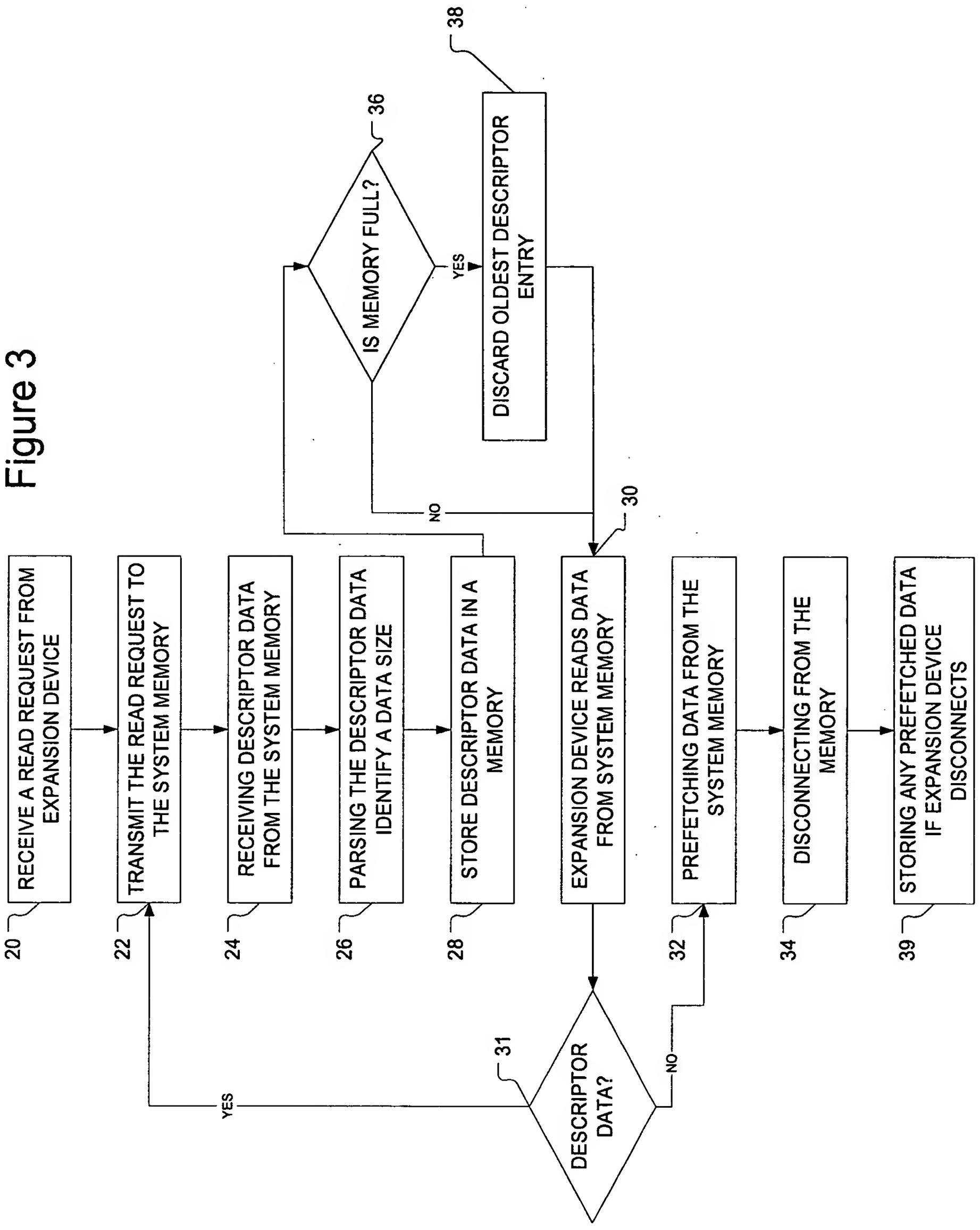


Figure 2

Figure 3


RECEIVE A READ REQUEST FROM EXPANSION DEVICE
20
TRANSMIT THE READ REQUEST TO THE SYSTEM MEMORY
22
RECEIVING DESCRIPTOR DATA FROM THE SYSTEM MEMORY
24
PARSING THE DESCRIPTOR DATA IDENTIFY A DATA SIZE
26
STORE DESCRIPTOR DATA IN A MEMORY
28
EXPANSION DEVICE READS DATA FROM SYSTEM MEMORY
30
DESCRIPTOR DATA?
31
YES
NO
PREFETCHING DATA FROM THE SYSTEM MEMORY
32
DISCONNECTING FROM THE MEMORY
34
STORING ANY PREFETCHED DATA IF EXPANSION DEVICE DISCONNECTS
39
IS MEMORY FULL?
36
YES
NO
DISCARD OLDEST DESCRIPTOR ENTRY
38

ACCESSING THE DATA SIZE FROM THE DESCRIPTOR FOR DATA
ISSUING A READ REQUEST TO THE SYSTEM MEMORY
TRANSMITTING DATA RECEIVED IN RESPONSE TO THE READ REQUEST TO EXPANSION DEVICE
40
42
44

Figure 4